Distributed Generation Program

Sally A. Talberg, Chairman
Michigan Public Service Commission

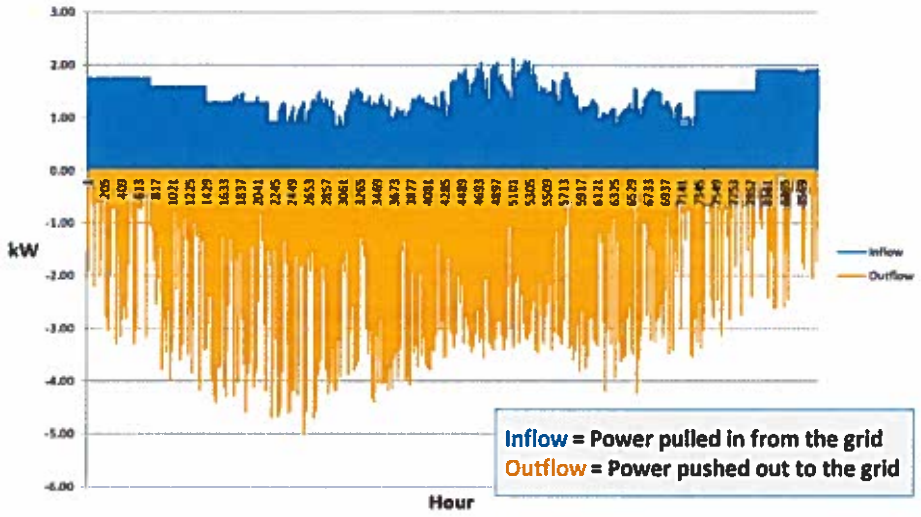
May 1, 2018

MPSC
Michigan Public Service Commission

DG Billing Mechanisms

- **Inflow/Outflow:**
  - Customer pays full retail rate for all deliveries from the utility ("Inflow")
  - Customer receives credit for any generation not used on site and exported to the grid ("Outflow")
- **Net Metering:**
  - Customer's monthly bill is based on net usage (Inflow – Outflow). The customer receives a credit at full retail rate for any excess generation over course of month
- **Buy All/Sell All:**
  - Customer purchases all of their consumption from the utility at full retail rates. All generation from the customer's system is sold to the utility.
  - None of the customer's generation is used to offset utility purchases.

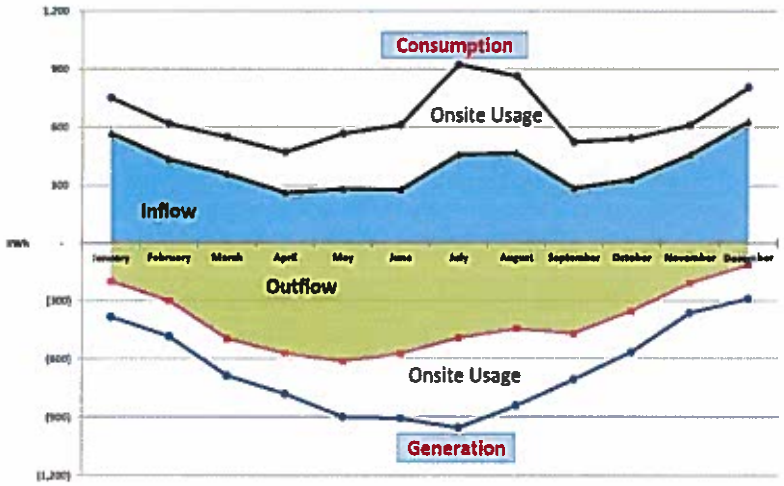
Residential Distributed Generation Customer Hourly Inflow & Outflow (kW)



Source: MPSC. Note: January – December assuming solar PV capacity of 6.28 kW (AC)

Residential Distributed Generation Comparison of Power Flow Parameters

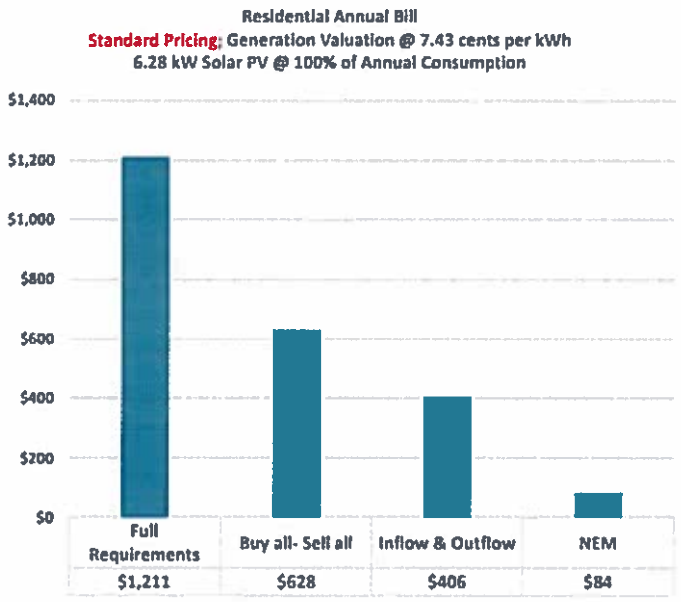
6.28 kW Solar PV [100% of Annual Consumption]: 8760 hour analysis



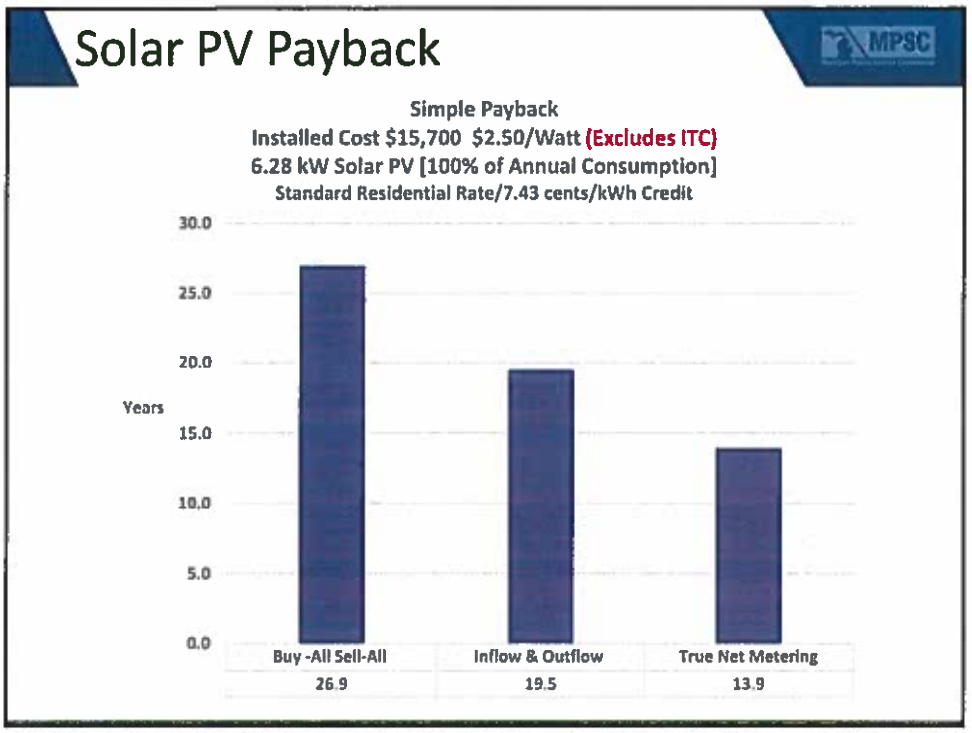
MPSC charge under 2016 laws

- Phase out net metering and replace with new "distributed generation" program
- Conduct study on "an appropriate tariff reflecting equitable cost of service"
- Apply new tariff in utility rate cases filed after June 1, 2018
- Existing net metering customers retain net metering 10 years from date of enrollment

Annual Bill Comparison



Solar PV Payback



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Issue Brief

Distributed Generation

1. What is "distributed generation"?

Distributed generation refers to electric generation resources located throughout the electric distribution grid that are usually owned by customers, often smaller in scale, and typically powered by renewable energy (such as wind, solar, or biomass). Distributed generation is distinct from centralized, utility-owned generation sources like traditional power plants fueled by coal, natural gas, nuclear power or utility-scale solar or wind farms.

2. What is "net metering"?

Public Act 295 of 2008 established a net metering program which allowed Michigan utility customers to use on-site renewable energy generation to meet some or all of their electric needs. Under this program, a net metering customer receives a credit at the full retail rate from the electric provider for any excess electricity delivered to the grid during the billing month. Customers with larger projects qualify for modified net metering and receive a credit equal to a portion of the full retail rate.

3. What do the new energy laws require of the Michigan Public Service Commission (MPSC) regarding distributed generation and net metering?

Public Acts 341 and 342 of 2016 require the MPSC to phase out the net metering program and create a new distributed generation program to replace the net metering program. Existing customers under net metering **and** customers who enroll prior to the establishment of new rates for the distributed generation program in a utility rate case can continue under net metering for 10 years after enrollment. For all other customers, the law requires the MPSC to end net metering and apply new rates for the distributed generation program. Specifically:

- Section 173 of Public Act 342 requires the MPSC to replace the net metering program with a new distributed generation program.
- Section 6a (14) of Public Act 341 requires the MPSC to conduct a study on an appropriate tariff reflecting equitable cost of service for customers who participate in the distributed generation program.
- Section 6a (14) also requires electric utilities to include this distributed generation tariff in rate case filings after June 1, 2018.

4. How has the MPSC addressed these requirements?

The MPSC conducted research and a stakeholder process to implement the distributed generation provisions of the new energy law. Specifically:

- The MPSC adopted an order in Case No. U-18383 establishing an interim distributed generation program to replace the net metering program.
- The MPSC Staff conducted a study on the equitable cost of service for customers who participate in the distributed generation program and submitted a report to the docket in Case No. U-18383 on February 21, 2018.
- The MPSC issued an order on April 18, 2018 in Case No. U-18383 approving a tariff, based on the Staff's proposed Inflow/Outflow billing mechanism, that each electric utility is required to file in rate cases submitted after June 1, 2018.

5. How are existing net metering program customers affected by the new law?

Sec. 183(1) of Public Act 342 allows existing net metering program customers to maintain current program terms and conditions for 10 years from the date of enrollment in the program. The MPSC reaffirmed this principle in its U-18383 Order on July 12, 2017.

Customers who sign up before new rates for the distributed generation program are established by the MPSC in a utility rate case filed after June 1, 2018 will also be able to maintain the terms and conditions under the net metering program for 10 years from the date of enrollment.

A customer is considered "enrolled" in the program if they have submitted a complete application to their utility. A utility has 10 business days from the submission date of the application to inform the customer whether the application is complete or deficient. The customer is given 60 days from the date of notification to rectify a deficient application.

When a final distributed generation tariff is approved for each electric utility in rate cases filed after June 1, 2018, new customers, and any existing customers who have surpassed 10 years on a previous program, will fall under the new distributed generation tariff.

6. How did the MPSC determine an "appropriate tariff reflecting equitable cost of service" for distributed generation customers?

Sec. 6a (14) of Public Act 341 requires the MPSC to study "an appropriate tariff reflecting equitable cost of service for utility revenue requirements for customers who participate in a net metering program or distributed generation program" and to approve such a tariff in utility rate cases filed after June 1, 2018.

MPSC Staff analyzed available data on distributed generation customers, researched pricing models around the country, consulted with outside experts, and engaged stakeholders in a study of distributed generation and related cost-of-service issues.

The study showed that billing distributed generation customers according to the kWh delivered during the month equitably recovered the costs these customers imposed on the utility system. The study also found that, for utilities with advanced metering infrastructure, the excess electricity that customers put onto the electric grid can be calculated, and that a credit for this excess electricity can be established to appropriately compensate distributed generation customers for the value of the energy put onto the grid. MPSC Staff recommended using an "Inflow/Outflow billing mechanism" to reflect equitable cost of service.

7. What is the Inflow/Outflow billing mechanism?

"Inflow" means the electricity a customer uses from the utility distribution system. "Outflow" means the electricity generated by the customer's distributed generation project that is not used on-site and is instead sent to the electric grid. The Inflow/Outflow billing mechanism measures and prices the incoming and outgoing electricity flows separately on an instantaneous basis. This mechanism establishes a basis for consistent and appropriate cost-of-service billing.

In its April 18, 2018 Order in Case No. U-18383, the MPSC adopted a tariff based upon the Inflow/Outflow billing mechanism that regulated electric utilities are expected to submit in any rate case filed after June 1, 2018.

8. What is the difference between the Inflow/Outflow and net metering billing mechanisms?

Inflow/Outflow separates power inflows from power outflows, relying on two distinct and independent sets of meter data to establish consistent and appropriate cost-of-service allocators and billing determinants. Net metering captures a customer's net energy usage. The Inflow/Outflow billing mechanism creates a more complete picture of a customer's energy usage and excess generation and is better equipped to reflect distributed generation customers' cost of service.

9. How will the actual Inflow charge and the Outflow credit for each utility be determined?

The MPSC will determine the Inflow/Outflow charge and credit in all regulated electric utility rate cases filed after June 1, 2018.

10. When will the new distributed generation program take effect?

Electric utility rate cases filed after June 1, 2018 are required to include distributed generation program tariffs. The new distributed generation program provisions do not take effect until a final order is approved by the MPSC in a rate case filed after June 1, 2018.

11. What are regulated electric utilities required to do after June 1, 2018?

As provided for by the MPSC's April 18, 2018 Order, electric utilities regulated by the MPSC must file a proposed tariff that has the Inflow/Outflow tariff as its basis. The utilities may also file their own proposals as well. The MPSC will review and approve a final tariff as part of its final determination in each rate case.

12. What if the utility does not file a rate case soon after June 1, 2018? Will net metering continue to be available as is until the new tariffs are approved in a rate case?

Utilities are not required to file rate cases at specific times. Some utilities file rate cases fairly frequently while others may wait several years between cases. Depending on the utility, it could be some time before the new distributed generation tariff changes are in effect. These changes must be approved in a rate case based on the law. In the meantime, net metering will be available.

13. Is there a cap on how many customers can participate in a utility's distributed generation program?

Sec. 173 of PA 342 limits the participation in the distributed generation program to 1% of an electric utility's average in-state peak load for the preceding five years. The 1% limit is made up of the following components:

- Up to 0.5% for customers with a distributed generation project of 20 kilowatts or less
- Up to 0.25% for customers with a distributed generation project of between 20 kilowatts and 150 kilowatts
- Up to 0.25% for customers with a methane digester of 150 kilowatts or more

14. Did MPSC Staff solicit stakeholder input in the process of producing the study? Will the MPSC allow for stakeholder input in the process of determining a final tariff in each rate case filed after June 1, 2018?

Yes. MPSC Staff held seven stakeholder meetings in 2017 to receive feedback on Staff's study of the appropriate distributed generation tariff reflecting equitable cost of service. The MPSC anticipates broad stakeholder participation from intervenors and public commenters in each rate case that will determine the final tariff. Visit the MPSC's **website** for information on how to comment or participate in a utility rate case. An MPSC **issue brief** also discusses the rate case process in more detail.

15. What impact will these changes have on customers interested in solar at their home or business or other types of distributed generation?

For current net metering customers, as well as customers who sign up for the distributed generation program before new rates are set in a rate case filed after June 1, 2018, the terms and conditions of the existing program will be available for ten years from the date of enrollment. New distributed generation tariffs will be adopted in electric utility rate cases filed after June 1, 2018, and final decisions are yet to be determined, so the impact remains to be seen. However, the federal investment tax credit continues to be available to offset costs associated with installing solar projects, and costs of distributed generation projects continue to fall, increasing their economic viability.

16. If I am working with a contractor to potentially install solar panels at my home or business, what should I do to find out more about the rates and how the program works?

Talk to your contractor and utility to make sure you have up-to-date information. For more information, visit the MPSC's webpage on customer generation, including rules for interconnecting customer generation with utility systems.

For more information, visit:
www.michigan.gov/mpsc

April 18, 2018

DISCLAIMER: This document was prepared to aid the public's understanding of certain matters before the Commission and is not intended to modify, supplement, or be a substitute for the Commission's orders. The Commission's orders are the official action of the Commission.

Excerpt: Senate Bill 437 (2015)

PA 341 of 2016

Senate Concurred Bill

MCL 460.6a(14)

WASTE REDUCTION, CONSERVATION, DEMAND-SIDE PROGRAMS, AND OTHER WASTE REDUCTION MEASURES APPROVED BY THE COMMISSION IN THAT UTILITY'S MOST RECENT INTEGRATED RESOURCE PLAN.

(13) THE COMMISSION SHALL CONSIDER THE AGGREGATE REVENUES ATTRIBUTABLE TO REVENUE DECOUPLING MECHANISMS, FINANCIAL INCENTIVES, AND SHARED SAVINGS MECHANISMS THE COMMISSION HAS APPROVED FOR AN ELECTRIC UTILITY RELATIVE TO ENERGY WASTE REDUCTION, CONSERVATION, DEMAND-SIDE PROGRAMS, PEAK LOAD REDUCTION, AND OTHER WASTE REDUCTION MEASURES. THE COMMISSION MAY APPROVE AN ALTERNATIVE METHODOLOGY FOR A REVENUE DECOUPLING MECHANISM AUTHORIZED UNDER SUBSECTION (12), A FINANCIAL INCENTIVE AUTHORIZED UNDER SECTION 75 OF THE CLEAN AND RENEWABLE ENERGY AND ENERGY WASTE REDUCTION ACT, 2008 PA 295, MCL 460.1075, OR A SHARED SAVINGS MECHANISM AUTHORIZED UNDER SECTION 6X IF THE COMMISSION DETERMINES THAT THE RESULTING AGGREGATE REVENUES FROM THOSE MECHANISMS WOULD NOT RESULT IN A REASONABLE AND COST-EFFECTIVE METHOD TO ENSURE THAT INVESTMENTS IN ENERGY WASTE REDUCTION, DEMAND-SIDE PROGRAMS, PEAK LOAD REDUCTION, AND OTHER WASTE REDUCTION MEASURES ARE NOT DISFAVORED WHEN COMPARED TO UTILITY SUPPLY-SIDE INVESTMENTS. THE COMMISSION'S CONSIDERATION OF AN ALTERNATIVE METHODOLOGY UNDER THIS SUBSECTION SHALL BE CONDUCTED AS A CONTESTED CASE PURSUANT TO CHAPTER 4 OF THE ADMINISTRATIVE PROCEDURES ACT OF 1969, 1969 PA 306, MCL 24.271 TO 24.287.

(14) WITHIN 1 YEAR AFTER THE EFFECTIVE DATE OF THE AMENDATORY ACT THAT ADDED THIS SUBSECTION, THE COMMISSION SHALL CONDUCT A STUDY ON AN APPROPRIATE TARIFF REFLECTING EQUITABLE COST OF SERVICE FOR UTILITY REVENUE REQUIREMENTS FOR CUSTOMERS WHO PARTICIPATE IN A

NET METERING PROGRAM OR DISTRIBUTED GENERATION PROGRAM UNDER THE CLEAN AND RENEWABLE ENERGY AND ENERGY WASTE REDUCTION ACT, 2008 PA 295, MCL 460.1001 TO 460.1211. IN ANY RATE CASE FILED AFTER JUNE 1, 2018, THE COMMISSION SHALL APPROVE SUCH A TARIFF FOR INCLUSION IN THE RATES OF ALL CUSTOMERS PARTICIPATING IN A NET METERING OR DISTRIBUTED GENERATION PROGRAM UNDER THE CLEAN AND RENEWABLE ENERGY AND ENERGY WASTE REDUCTION ACT, 2008 PA 295, MCL 460.1001 TO 460.1211. A [TARIFF] ESTABLISHED UNDER THIS SUBSECTION DOES NOT APPLY TO CUSTOMERS PARTICIPATING IN A NET METERING PROGRAM UNDER THE CLEAN AND RENEWABLE ENERGY AND ENERGY WASTE REDUCTION ACT, 2008 PA 295, MCL 460.1001 TO 460.1211, BEFORE THE DATE THAT THE COMMISSION ESTABLISHES A [TARIFF] UNDER THIS SUBSECTION, WHO CONTINUES TO PARTICIPATE IN THE PROGRAM AT THEIR CURRENT SITE OR FACILITY.

(15) EXCEPT AS OTHERWISE PROVIDED IN THIS ACT, "UTILITY" AND "ELECTRIC UTILITY" DO NOT INCLUDE A MUNICIPALLY OWNED ELECTRIC UTILITY.

(16) AS USED IN THIS SECTION:

(A) "FULL AND COMPLETE HEARING" MEANS A HEARING THAT PROVIDES INTERESTED PARTIES A REASONABLE OPPORTUNITY TO PRESENT AND CROSS-EXAMINE EVIDENCE AND PRESENT ARGUMENTS RELEVANT TO THE SPECIFIC ELEMENT OR ELEMENTS OF THE REQUEST THAT ARE THE SUBJECT OF THE HEARING.

(B) "GENERAL RATE CASE" MEANS A PROCEEDING INITIATED BY A UTILITY IN AN APPLICATION FILED WITH THE COMMISSION THAT ALLEGES A REVENUE DEFICIENCY AND REQUESTS AN INCREASE IN THE SCHEDULE OF RATES OR CHARGES BASED ON THE UTILITY'S TOTAL COST OF PROVIDING SERVICE.

Excerpt: Senate Bill 438 (2015)

PA 342 of 2016

Senate Concurred Bill

MCL 460.1173 – 460.1185

ELECTRIC UTILITY OR COOPERATIVE ELECTRIC UTILITY AND THE ATTORNEY GENERAL OR CUSTOMER SHALL MEET AND MAKE A GOOD-FAITH ATTEMPT TO DETERMINE IF THERE IS A CREDIBLE BASIS FOR THE ACTION. THE MUNICIPALLY OWNED ELECTRIC UTILITY OR COOPERATIVE ELECTRIC UTILITY SHALL TAKE ALL REASONABLE AND PRUDENT STEPS NECESSARY TO COMPLY WITH THE APPLICABLE REQUIREMENTS OF THIS SUBPART OR AN ORDER ISSUED OR RULE PROMULGATED UNDER THIS SUBPART WITHIN 90 DAYS AFTER THE MEETING IF THERE IS A CREDIBLE BASIS FOR THE ACTION. IF THE PARTIES DO NOT AGREE AS TO WHETHER THERE IS A CREDIBLE BASIS FOR THE ACTION, THE ATTORNEY GENERAL OR CUSTOMER MAY PROCEED TO FILE THE SUIT.

SUBPART ~~C.~~D. MISCELLANEOUS

Sec. 113. **(1)** Notwithstanding any other provision of this part, ~~electricity or~~ natural gas used in the installation, operation, or testing of any pollution control equipment is exempt from the requirements of, and calculations of compliance required under, this part.

(2) THIS SECTION, AS AMENDED BY THE ACT THAT ADDED THIS SUBSECTION, TAKES EFFECT JANUARY 1, 2021.

PART 5.

~~NET METERING~~**DISTRIBUTED GENERATION**

Sec. 173. (1) The commission shall establish a ~~statewide net metering~~ **DISTRIBUTED GENERATION** program by order issued not later than ~~180~~ 90 days after the effective date of ~~this act. No later than 180 days after the effective date of this act, the commission shall promulgate rules regarding any time limits on the submission of net metering applications or inspections of net metering~~

~~equipment and any other matters the commission considers necessary to implement this part.~~ **THE 2016 ACT THAT AMENDED THIS SECTION. THE COMMISSION MAY PROMULGATE RULES THE COMMISSION CONSIDERS NECESSARY TO IMPLEMENT THIS PROGRAM.** Any rules adopted regarding time limits for approval of parallel operation shall recognize reliability and safety complications including those arising from equipment saturation, use of multiple technologies, and proximity to synchronous motor loads. The program shall apply to all electric utilities **WHOSE RATES ARE REGULATED BY THE COMMISSION** and alternative electric suppliers in this state.

(2) Except as otherwise provided under this part, ~~customers~~ **AN ELECTRIC CUSTOMER** of any class ~~are~~ **IS** eligible to interconnect **AN** eligible electric ~~generators~~ **GENERATOR** with the customer's local electric utility and operate the ~~generators~~ **ELIGIBLE ELECTRIC GENERATOR** in parallel with the distribution system. The program shall be designed for a period of not less than 10 years and limit each customer to generation capacity designed to meet ~~only the customer's electric needs.~~ **UP TO 100% OF THE CUSTOMER'S ELECTRICITY CONSUMPTION FOR THE PREVIOUS 12 MONTHS.** The commission may waive the application, interconnection, and installation requirements of this part for customers participating in the net metering program under the commission's March 29, 2005 order in case no. U-14346.

(3) ~~(2)~~ An electric utility or alternative electric supplier is not required to allow for ~~net metering~~ **A DISTRIBUTED GENERATION PROGRAM** that is greater than 1% of its **AVERAGE** in-state peak load for the preceding 5 calendar ~~year.~~ **YEARS.** The **ELECTRIC** utility or **ALTERNATIVE ELECTRIC** supplier shall notify the commission if its

~~net metering~~ **DISTRIBUTED GENERATION** program reaches the 1% ~~requirement~~ **LIMIT** under this subsection. The 1% limit under this subsection shall be allocated as follows:

(a) No more than 0.5% for customers with ~~a system~~ **AN ELIGIBLE ELECTRIC GENERATOR** capable of generating 20 kilowatts or less.

(b) No more than 0.25% for customers with ~~a system~~ **AN ELIGIBLE ELECTRIC GENERATOR** capable of generating more than 20 kilowatts but not more than 150 kilowatts.

(c) No more than 0.25% for customers with a ~~system~~ **METHANE DIGESTER** capable of generating more than 150 kilowatts.

(4) ~~(3)~~ Selection of customers for participation in the ~~net metering~~ **DISTRIBUTED GENERATION** program shall be based on the order in which the applications for participation in the ~~net metering~~ program are received by the electric utility or alternative electric supplier.

(5) ~~(4)~~ An electric utility or alternative electric supplier shall not **DISCONTINUE OR** refuse to provide ~~or discontinue~~ electric service to a customer solely ~~for the reason that~~ **BECAUSE** the customer participates in the ~~net metering~~ **DISTRIBUTED GENERATION** program.

(6) ~~(5)~~ The **DISTRIBUTED GENERATION** program created under subsection (1) shall include all of the following:

(a) Statewide uniform interconnection requirements for all eligible electric generators. The interconnection requirements shall be designed to protect electric utility workers and equipment and the general public.

(b) ~~Net metering~~ **DISTRIBUTED GENERATION** equipment and its

installation ~~must~~ **SHALL** meet all current local and state electric and construction code requirements. Any equipment that is certified by a nationally recognized testing laboratory to IEEE 1547.1 testing standards and in compliance with UL 1741 scope 1.1A, effective May 7, 2007, and installed in compliance with this part is considered to be ~~eligible equipment.~~ **COMPLIANT.** Within the time provided by the commission in rules promulgated under subsection (1) and consistent with good utility practice, **AND THE** protection of electric utility workers, ~~protection of~~ electric utility equipment, and ~~protection of~~ the general public, an electric utility may study, confirm, and ensure that an eligible electric generator installation at the customer's site meets the IEEE 1547 anti-islanding requirements ~~. Utility testing and approval of the interconnection and execution of a parallel operating agreement~~ **OR ANY APPLICABLE SUCCESSOR ANTI-ISLANDING REQUIREMENTS DETERMINED BY THE COMMISSION TO BE REASONABLE AND CONSISTENT WITH THE PURPOSES OF THIS SUBDIVISION. IF NECESSARY TO PROMOTE RELIABILITY OR SAFETY, THE COMMISSION MAY PROMULGATE RULES THAT REQUIRE THE USE OF INVERTERS THAT PERFORM SPECIFIC AUTOMATED GRID-BALANCING FUNCTIONS TO INTEGRATE DISTRIBUTED GENERATION ONTO THE ELECTRIC GRID. INVERTERS THAT INTERCONNECT DISTRIBUTED GENERATION RESOURCES MAY BE OWNED AND OPERATED BY ELECTRIC UTILITIES. BOTH OF THE FOLLOWING** must be completed ~~prior to~~ **BEFORE** the equipment ~~operating~~ **IS OPERATED** in parallel with the distribution system of the utility: ~~.~~

(*i*) UTILITY TESTING AND APPROVAL OF THE INTERCONNECTION, INCLUDING ALL METERING.

(*ii*) EXECUTION OF A PARALLEL OPERATING AGREEMENT.

(c) A uniform application form and process to be used by all electric utilities and alternative electric suppliers in this state. Customers who are served by an alternative electric supplier shall submit a copy of the application to the electric utility for the customer's service area.

(d) ~~Net metering~~ **DISTRIBUTED GENERATION** customers with a system capable of generating 20 kilowatts or less qualify for true net metering.

(e) ~~Net metering~~ **DISTRIBUTED GENERATION** customers with a system capable of generating more than 20 kilowatts qualify for modified net metering.

(7) ~~(6)~~ Each electric utility and alternative electric supplier shall maintain records of all applications and up-to-date records of all active eligible electric generators located within their service area.

Sec. 175. (1) An electric utility or alternative electric supplier may charge a fee not to exceed ~~$100.00~~ $50.00 to process an application ~~for net metering. A customer with a system capable of generating more than 20 kilowatts~~ **TO PARTICIPATE IN THE DISTRIBUTED GENERATION PROGRAM. THE CUSTOMER** shall pay all interconnection costs. ~~A customer with a system capable of generating more than 150 kilowatts shall pay standby costs.~~ The commission shall recognize the reasonable cost for each electric utility and alternative electric supplier to operate a ~~net metering~~ **DISTRIBUTED GENERATION** program. For an electric utility with 1,000,000 or more retail customers in this state, the commission shall include in that **ELECTRIC** utility's nonfuel base rates all

costs of meeting all program requirements except that all energy costs of the program shall be recovered through the utility's power supply cost recovery mechanism under ~~sections~~ **SECTION** 6j ~~and 6k~~ of 1939 PA 3, MCL 460.6j. ~~and 460.6k.~~ For an electric utility with ~~less~~ **FEWER** than 1,000,000 base distribution customers in this state, the commission shall allow that **ELECTRIC** utility to recover all energy costs of the program through the power supply cost recovery mechanism under ~~sections~~ **SECTION** 6j ~~and 6k~~ of 1939 PA 3, MCL 460.6j, ~~and 460.6k,~~ and shall develop a cost recovery mechanism for that utility to contemporaneously recover all other costs of meeting the program requirements.

(2) The interconnection requirements of the ~~net metering~~ **DISTRIBUTED GENERATION** program shall provide that an electric utility or alternative electric supplier shall, subject to any time requirements imposed by the commission and upon reasonable written notice to the ~~net metering~~ **DISTRIBUTED GENERATION** customer, perform testing and inspection of an interconnected eligible electric generator as is necessary to determine that the system complies with all applicable electric safety, power quality, and interconnection, **INCLUDING METERING,** requirements. The costs of testing and inspection are considered a cost of operating a ~~net metering~~ **DISTRIBUTED GENERATION** program and shall be recovered under subsection (1).

(3) The interconnection requirements shall require all eligible electric generators, alternative electric suppliers, and electric utilities to comply with all applicable federal, state, and local laws, rules, or regulations, and any national standards

as determined by the commission.

Sec. 177. (1) Electric meters shall be used to determine the amount of the customer's energy use in each billing period, net of any excess energy the customer's generator delivers to the utility distribution system during that same billing period. For a customer with a generation system capable of generating more than 20 kilowatts, the utility shall install and utilize a generation meter and a meter or meters capable of measuring the flow of energy in both directions. A customer with a system capable of generating more than 150 kilowatts shall pay the costs of installing any new meters.

(2) An electric utility serving over 1,000,000 customers in this state may provide its customers participating in the ~~net metering~~ **DISTRIBUTED GENERATION** program, at no additional charge, a meter or meters capable of measuring the flow of energy in both directions.

(3) An electric utility serving fewer than 1,000,000 customers in this state shall provide a meter or meters described in subsection (2) to customers participating in the ~~net metering~~ **DISTRIBUTED GENERATION** program at cost. Only the incremental cost above that for meters provided by the electric utility to similarly situated nongenerating customers shall be paid by the eligible customer.

(4) If the quantity of electricity generated and delivered to the utility distribution system by an eligible electric generator during a billing period exceeds the quantity of electricity supplied from the electric utility or alternative electric supplier

during the billing period, the eligible customer shall be credited by their supplier of electric generation service for the excess kilowatt hours generated during the billing period. The credit shall appear on the bill for the following billing period and shall be limited to the total power supply charges on that bill. Any excess kilowatt hours not used to offset electric generation charges in the next billing period will be carried forward to subsequent billing periods. Notwithstanding any law or regulation, ~~net metering~~ **DISTRIBUTED GENERATION** customers shall not receive credits for electric utility transmission or distribution charges. The credit per kilowatt hour for kilowatt hours delivered into the utility's distribution system shall be either of the following:

(a) The monthly average real-time locational marginal price for energy at the commercial pricing node within the electric utility's distribution service territory, or for ~~net metering~~ **DISTRIBUTED GENERATION** customers on a time-based rate schedule, the monthly average real-time locational marginal price for energy at the commercial pricing node within the electric utility's distribution service territory during the time-of-use pricing period.

(b) The electric utility's or alternative electric supplier's power supply component, **EXCLUDING TRANSMISSION CHARGES**, of the full retail rate during the billing period or time-of-use pricing period.

(5) A CHARGE FOR NET METERING AND DISTRIBUTED GENERATION CUSTOMERS ESTABLISHED PURSUANT TO SECTION 6A OF 1939 PA 3, MCL 460.6A, SHALL NOT BE REDUCED BY ANY CREDIT OR OTHER RATEMAKING

MECHANISM FOR DISTRIBUTED GENERATION UNDER THIS SECTION.

Sec. 179. ~~An eligible electric generator~~ A CUSTOMER shall own any renewable energy credits granted for electricity generated ON THE CUSTOMER'S SITE under the ~~net metering~~ DISTRIBUTED GENERATION program created in this part.

SEC. 183. (1) A CUSTOMER PARTICIPATING IN A NET METERING PROGRAM APPROVED BY THE COMMISSION BEFORE THE COMMISSION ESTABLISHES A TARIFF PURSUANT TO SECTION 6A(14) OF 1939 PA 3, MCL 460.6A, MAY ELECT TO CONTINUE TO RECEIVE SERVICE UNDER THE TERMS AND CONDITIONS OF THAT PROGRAM FOR UP TO 10 YEARS FROM THE DATE OF ENROLLMENT.

(2) SUBSECTION (1) DOES NOT APPLY TO AN INCREASE IN THE GENERATION CAPACITY OF THE CUSTOMER'S ELIGIBLE ELECTRIC GENERATOR BEYOND THE CAPACITY ON THE EFFECTIVE DATE OF THIS SECTION.

SEC. 185. NOTWITHSTANDING ANY OTHER PROVISION OF THIS ACT, THIS ACT DOES NOT LIMIT OR RESTRICT AN INDUSTRIAL CUSTOMER'S ABILITY TO BUILD, OWN, [OR OPERATE, OR HAVE A THIRD PARTY BUILD, OWN, OR] OPERATE 1 OR MORE SELF-GENERATION OR COGENERATION FACILITIES[, AND NONE OF THE PROVISIONS OF PART 5 SHALL BE CONSTRUED OR INTERPRETED TO APPLY TO SUCH FACILITIES].

PART 7.

RESIDENTIAL ENERGY IMPROVEMENTS

SEC. 201. AS USED IN THIS PART:

(A) "ENERGY PROJECT" MEANS THE INSTALLATION OR MODIFICATION OF AN ENERGY WASTE REDUCTION IMPROVEMENT OR THE ACQUISITION, INSTALLATION, OR IMPROVEMENT OF A RENEWABLE ENERGY SYSTEM.

(B) "ENERGY WASTE REDUCTION IMPROVEMENT" MEANS EQUIPMENT, DEVICES, OR MATERIALS INTENDED TO DECREASE ENERGY CONSUMPTION, INCLUDING, BUT NOT LIMITED TO, ALL OF THE FOLLOWING: